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Vol. CVIII

JULY, 1914

Number 7

NASHVILLE JOURNAL OF MEDICINE AND SURGERY

CHARLES S. BRIGGS, A. M., M. D., Editor and Proprietor
E. S. McKEE, M. D., Cincinnati, Associate Editor

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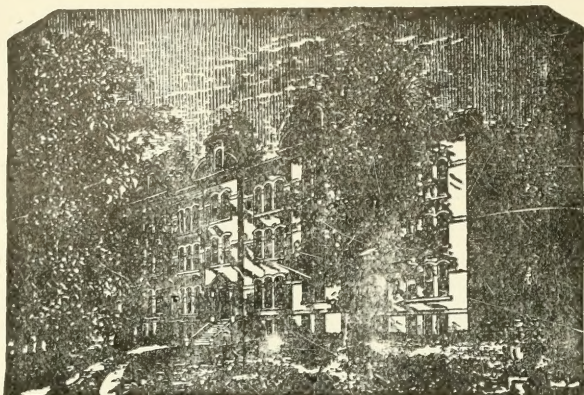
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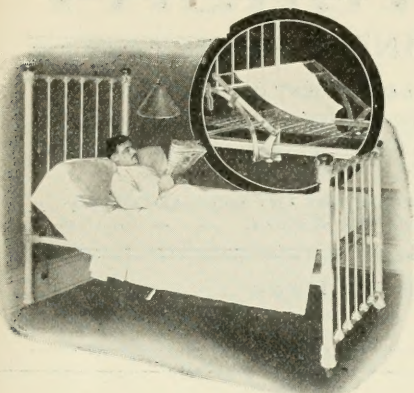
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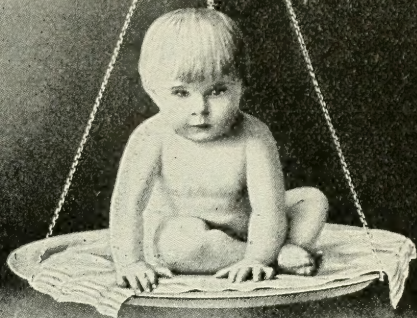
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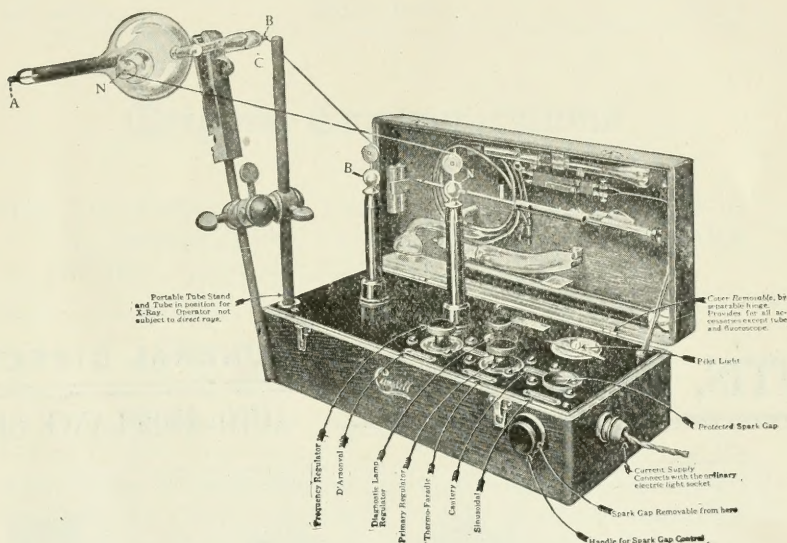
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NASHVILLE JOURNAL — OF — MEDICINE AND SURGERY

CHARLES S. BRIGGS, A. M., M. D., Editor

VOL. CVIII.

JULY, 1914.

No. 7

Original Communications

THE TWENTY-THIRD ANNUAL REPORT OF SURGICAL OPERATIONS AT THE PRIVATE INFIRMARY OF DRS. CHAS. S. AND SAMUEL S. BRIGGS.

Reported by

W. T. BRIGGS, M.D., Nashville, Tenn.

The twenty-third season began September 1, 1913, and closed August 1, 1914. The character of the work done is shown in the report of the following selected cases. The mortality seems high, but is due to a number of cases hopeless involved. Infections have been practically banished by care and improved methods. The A. C. E. mixture is still the anesthetic of choice, though chloroform was used frequently. Local anesthesia was used more than formerly, the combination of novocaine and adrenalin being used. In most cases anoci association was carried out. The amount of anesthetic used may seem large, but at least 70 per cent is used in inducing anesthesia, very little being required to maintain the condition.

Case No. II. Inguinal Hernia. Bassini. C. B., Atlanta, Ga. Admitted September 4. This patient presented a complete oblique inguinal hernia of the left side. After the usual preparatory treatment the patient was anesthetized with the A. C. E. mixture and a four inch incision was made parallel to and an inch above

Poupart's ligament, exposing the aponeurosis of the external oblique muscle. The pillars of the external ring were exposed thoroughly and the intercolumnar fascia was divided, the line of separation being continued through the fibres of the aponeurosis to the level of the internal ring, exposing the hernial sac, which was lifted from its bed in the canal. The spermatic cord was separated from the sac and held aside by an assistant, while the lower arched fibres of the internal oblique and transversalis were cleared. The sac being freed, was drawn down and its neck was closed by a mattress suture of catgut. The sac was then divided and removed entirely. The posterior wall of the canal was reinforced by carrying mattress sutures of chromatinized catgut through the shelving process of Poupart's ligament, and the lower arched fibres of the internal oblique and transversalis muscles. The cord was then replaced and the aponeurosis was closed over it by a continuous catgut suture, using care not to strangulate the cord. The skin wound was closed by a continuous catgut suture, and the usual dressings were applied. The patient made an uninterrupted recovery and was dismissed October 3.

Case No. IV. Hemorrhoids—Ligation. W. F. D., æt. 42, Sardis, Tenn., admitted September 9. This patient had suffered for seven years from extensive rectal tumors, which were frequently inflamed and bled constantly. Under A. C. E. the sphincter was thoroughly divulsed and each pile was ligated after encircling its base with an incision through the muscosa. The masses were then excised. The case was complicated with quite a large ulcer above the pile-bearing area, which required the frequent application of argyrol. The patient was entirely relieved and dismissed October 3.

Case No. V. Amputation of Breast for Carcinoma. Mrs. L., æt. 46, Paris, Tenn. Admitted September 16. This patient presented a hard nodular mass in the right breast, with enlarged axillary glands. Under A. C. E. the breast was encircled by an elliptical incision, the upper limb of which was extended out along the margin of the pectoral muscle. The breast was removed with the pectoral fascia and the pectoral portion of

the muscles was also removed. The axillary space was easily cleared of glands and cellular tissue. The wound was closed with worm gut sutures and the arm was immobilized by a bandage. The wound healed kindly and the patient was dismissed October 4.

Case No. VII. Congenital Inguinal Hernia. C. P., æt. 18, city. Admitted September 16. This patient presented a congenital hernia of the right side with the testicle retained in the canal. After the usual preparatory treatment the patient was anesthetized with A. C. E. A free incision was made parallel to Poupart's ligament, exposing the aponeurosis. The external ring was carefully exposed and enlarged outward by dividing the intercolumnar fascia, and separating the fibres of the aponeurosis; beyond the site of the internal ring the sac and cord were then freed and lifted out of the canal and the internal ring was demonstrated. The neck of the sac was freed well into the ring. The sac was opened and the testicle, only partially descended, was removed after the vessels were tied. With it was removed the sac, the neck of which was secured with the ligatures of the cord. The lower arched fibres of the internal oblique and transversalis were drawn to the shelving process of Poupart's ligament by mattress sutures of chromatinized catgut. The internal ring was thus obliterated and the external ring was reduced to the smallest dimensions by a continuous catgut suture. The external wound was closed by a continuous catgut suture. The convalescence was uneventful and the patient was dismissed October 11.

Case No. VIII. Chronic Appendicitis. Miss H. H., æt. 20, Ownesboro,, Ky. Admitted September 25. This patient had suffered for some time with digestive troubles with frequent abdominal pains and was quite tender over McBurney's point. After the usual preparations the patient was anesthetized with A. C. E. and an incision was made along the linea semilunaris, into the sheath of the right rectus, which was displaced toward the median line and the cavity was entered through the posterior layer of the sheath. The appendix was readily delivered and its meso was secured with catgut. The appendix was

removed and its stump was invaginated by a purse string suture of catgut. The wound was closed by three through and through worm gut sutures supplemented by seriatim catgut sutures. The patient was greatly relieved and left the Infirmary October 19.

Case No. X. Inoperable Carcinoma Uteri. Mrs. W. M. B., æt. 42, Erin, Tenn. Admitted September 16. This patient had suffered for some months with pain of pelvic origin and a fetid vaginal discharge with frequent irregular hemorrhages. Examination disclosed an extreme condition, the cervix having almost disappeared from ulceration. The uterus was firmly fixed, hard and nodular. Palliative treatment was instituted and after curetting thoroughly the parts were regularly irrigated, giving the patient relief from suffering. The patient grew progressively weaker and died shortly after returning home.

Case No. XI. Hysteropexy Oöphorectomy and Appendectomy. M. P. J., æt. 17, city. Admitted September 30. This patient had always suffered at her monthly periods and in September had been confined to her bed on account of severe abdominal pains and quite high fever, which persisted for two weeks. On account of the pain, she submitted to an examination, which disclosed a marked retroflexion of the uterus, with a prolapsed left ovary, and a very tender appendix. The course of the fever was very irregular, there being remissions of several days. On October 14 the patient was anesthetized A. C. E., the abdomen was opened in the middle line and the left ovary removed. The appendix was removed and the uterus was suspended by two twenty-day catgut sutures. The wound was closed with four wormgut sutures after coapting the fascial layers with catgut. The wound healed by first intention and the patient was entirely free from fever for two weeks, after which the patient had the same irregular fever as before. For three or four days she presented a high temperature, followed by three or four days of normal temperature. This kept up for five weeks. The patient returned home November 13 but was confined to her bed on account of the fever for three weeks more.

Case No. XIII. Acute Appendicitis. Mrs. M. P., æt. 22, Martha, Tenn. Admitted September 29. This patient was suffering pain in the right half of the abdomen with marked tenderness over McBurney's point. Temperature 101, pulse 110, respiration 30. The patient was hurriedly prepared and anesthetized with A. C. E. The usual incision was made through the sheath of the rectus and the swollen and inflamed appendix was delivered. Hemorrhage was troublesome but perfect hemostasis was finally secured, and the wound was closed by the combined through and through and seriatim sutures. The convalescence was uneventful and the patient was dismissed October 15.

Case No. XIV. Trachelorrhaphy and Perineorrhaphy. Mrs. V. L. P., æt. 40, Newark, Ark. Admitted October 11. This patient, a multipara, presented a badly lacerated perineum with the associated nervous symptoms. After several days of preparatory treatment the patient was anesthetized with A. C. E., and the cervix was freely pared and sutured with chromatized catgut. The perineum was repaired after the method of Emmett. The perineal sutures was removed on the ninth day, healing being complete. The patient was dismissed October 28.

Case No. XVI. Carcinoma of Cervix. Vaginal Hysterectomy. Mrs. J. T., æt. 42, Nashville, Tenn. Entered October 16 for the treatment of persistent metrorrhagia. Vaginal examination disclosed an indurated ulcer on the posterior lip of the cervix, extending well up into the canal. Examination caused profuse hemorrhage. The uterus was freely movable and the depth of the womb was not materially increased. After three days of preparatory treatment, the patient was anesthetized with A. C. E., and the uterus was removed without difficulty. The appendages were left. The wound of the vaginal walls was sutured around a drain extending into the pelvic cavity, and the ligated stumps of the broad ligaments were approximated by sutures. The ligatures came away on the tenth day and the patient was dismissed November 7.

Case No. XVIII. Tetanus from Wound of Thumb. J. E. M., æt. 28, Alexandria, Tenn. Admitted October 27 for treatment

of tetanus supervening upon a wound of the thumb received in a provender cutting machine. The thumb was amputated at his homeplace at the first joint and the patient seemed to be doing well until about the sixth day, when he was out driving cattle and was for some time in a hard rain. Symptoms of tetanus set up and his physician at once put him on the train and brought him to the Infirmary. The symptoms of tetanus was pronounced and he was carried to the operating room soon after he arrived. Anti-tetanic serum was given and the thumb found to be in a state of gangrene. Under A. C. E. the thumb was amputated at the carpo-metacarpal articulation. Morphine and chloral were administered sufficiently to control the convulsions but the patient sank rapidly and died on the third day.

Case No. XIX. Loss of Lower Lip. Cheiloplasty. J. I. L., æt. 14, Huntsville, Ala. Admitted October 17. This patient had lost the entire lower lip during infancy from salivation, and was unable to control saliva. Under chloroform a curved incision was made around each corner of the mouth, the narrow strip thus formed carrying the mucous border. These strips were approximated so as to form the border of the lower lip. Quite a large area over the chin was cicatricial and required removal. Two incisions curving down and backward from the chin into the skin of the neck marked two flaps which formed the body of the lip when united. These parts were secured with wormgut and horsehair sutures. The inner surface of the new lip was poorly supplied with mucous membrane and became adherent to the gum, though the membrane covering the gums seemed normal. The functional results was satisfactory but the cosmetic fell short of expectation.

Case No. XXI. Acute Appendicitis. J. B. M., æt. 63, city. Admitted October 25. This patient had had several severe attacks of appendicitis, but on account of his age and poor health, operation was put off until this attack. He had suffered for several days, presenting a large mass in the right side which was extremely tender. Under A. C. E. an incision was made over the mass and a pint of foul pus was evacuated. A search

was made for the appendix, but it was so buried by adhesions that it was left. The abscess was packed with gauze around a rubber drain. When this was removed on the third day, fecal matter escaped. The character of discharge changed at the end of the week and the wound healed rapidly. The patient very slowly recovered his strength and was dismissed November 22.

Case No. XXIII. Severe Hemorrhage from Trachelorrhaphy. Mrs. C. E. H., æt. 22, Hartsville, Tenn. Admitted November 2. This patient was badly lacerated in confinement. The cervical tear was very extensive on the left, and in healing there was formed a heavy strong band in the wall of the vagina which tilted the uterus. The perineal tear exposed the sphincter ani. Under A. C. E. the above mentioned adventitious band was divided in order to draw down the uterus. The laceration was freely pared and closed with chromatized catgut. The perineum was repaired after the method of Emmett. On the second day after the operation there was a copious hemorrhage and it was necessary to remove the perineal sutures in order to reach the source of hemorrhage which was from the wound made by dividing the band in the vaginal walls. This wound and the vagina were tamponed, but on the removal of the tampons the hemorrhage recurred. An effort was made to ligate the vessel but without success. The wound and the vagina were again tamponed with gauze saturated with a gelatin solution, after which the hemorrhage did not recur. The perineum was left for future operation. The patient was dismissed December 1.

Case No. XXV. Troublesome Epistaxis. S. L., æt. 57, city. Admitted October 23. This patient had bled profusely from the nose in the early morning and was sent to the Infirmary, and efforts were made to control the hemorrhage by spraying the cavities with a solution of adrenalin, which controlled it temporarily. The hemorrhage recurred the following night, when it was necessary to plug the posterior nares, using a Bellocq canula. The blood pressure after these profuse hemorrhages was 170 and subsided slowly under the influence of veratrum and rest in bed. On removal of the tampons the hemorrhage recurred and re-

quired the re-application of the plugs. Finally the tampons were saturated with a gelatin solution which seemed to control the hemorrhage which recurred, but in slighter degrees. The patient was dismissed October 18.

Case No. XXVII. Infection by Bacillus Welchi. Mrs. H. D., æt 31, Shackle Island, Tenn. Admitted November 8. This patient was brought to the Infirmary in an extremely septic condition, presenting a large ulcer over the sacrum and a greatly swollen thigh which was extremely hyperesthetic and was crepitant on pressure. The history of the case showed that two months before confinement she had received a fall on the sacrum, an abscess formed and the overlying tissues sloughed. At term she was delivered of a dead child and part of the placenta was retained and became septic. This was removed by the nurse but the septic condition continued. Eventually the right thigh became extremely painful, exquisitely tender and greatly swollen, giving crepitus on pressure. Under A. C. E. an incision was made into the abscess and a large quantity of gas and thin, sanious pus was evacuated. The cavity was thoroughly irrigated and a large rubber drain was introduced with gauze packed lightly around it. The wound drained profusely, requiring frequent dressings. The septic condition was not relieved, and after ten days she died.

Case No. XXVII. Appendectomy and Oöphorectomy. Mrs. L. R., æt. 28, city. Admitted November 12. This patient had been a great sufferer for a number of years, the suffering being accentuated at the menstrual period. Under A. C. E. the abdomen was opened in the middle line and the right ovary, which was cystic, was removed. The appendix was then delivered and after ligating, the meso was removed; the stump was buried by a purse-string suture. The retroflexed uterus was sutured to the anterior wall with kangaroo tendon and the wound was closed by five through and through wormgut sutures, after a careful closure of the peritoneum with catgut. The patient was entirely relieved and was dismissed November 29.

Case No. XXX. Crushed Hand. W. M. B., æt. 51, city. Admitted November 22. The patient presented a bad contusion of the right hand and the dorsum severely lacerated. The wound had been dressed several days before admittance and had become septic. The hand was severely inflamed and a great deal of sloughing occurred. The extensor tendons, with the exception of those of the thumb, were lost and exfoliations from the bones made their appearance at frequent dressings. After the separation of the sloughs and exfoliations the inflammation subsided, leaving a badly crippled hand.

Case No. XXXIII. Lacerated Wounds of Scalp and Face. Contusion of Right Chest Wall. Miss H. L. H., æt. 19, Nashville, Tenn., was brought to the Infirmary December 10, suffering from wounds sustained in an automobile accident. There were two long, deep lacerated wounds of the scalp over the right parietal bone, a wound extending from the external angular process of the frontal bone downward and backward across the zygoma and into the external ear and a brush wound over right scapula. The head was shaved on right side and prepared for operation. Under A. C. E. anesthetic a thorough examination for fracture was made but none detected though the bone lay exposed in the scalp wounds. The temporal artery could be seen pulsating in the posterior part of the facial wound. The wounds were thoroughly irrigated with normal saline, the edges approximated and dressings applied. Examination of the chest at this time was negative. For several days after injury the patient suffered excruciating pains in her right side and neck on movement so that some serious lesion was suspected, but no definite pathology could be found. The wounds healed rapidly and the patient was dismissed on the tenth day still suffering, however, with her neck and side.

Case No. XXXVI. Castration. Local Anesthesia. G. W., æt. 57, city. Admitted January 27. This patient presented a very much enlarged and tender right testicle which caused great discomfort on account of the size and weight. Novocain with adenalin was used as a local anesthetic, the patient directing its administration. The cord was exposed and the vessels were sev-

ered separately and the cord was divided. The testicle was then stripped out of the scrotum. The wound healed by first intention and the patient was dismissed February 8.

Case No. XXXIX. Salvarsan. H. N., æt. 28, Hartsville, Tenn. Admitted February 17. This patient had been under treatment by his physician for some time but the skin manifestation refused to yield to ordinary treatment and was sent to the Infirmary for the administration of 606. The median basilic was exposed by a short incision and the needle was introduced into the vein, and a ligature was placed temporarily around both vein and needle. It was then tested with normal saline. The salvarsan solution was then slowly introduced. There was no leakage. The patient was then put to bed. The reaction was slight, and after two days he returned home. There was some induration about the wound and after three weeks the wound opened and discharged for a few days. The luetic symptoms disappeared rapidly.

Case No. XLI. Ventral Hernia following Appendectomy. N. W., æt. 32, Paris, Tenn. Admitted January 12. For the relief of ventral hernia resulting from an operation for suppurating appendicitis. The orifice of the hernial sac was situated to the right of the upper end of the cicatrix. Under A. C. E. the cicatrix was dissected out and the ring exposed. The edge of the openings were freshened and the peritoneum was sutured with catgut. The sheath of the rectus was opened and that muscle was drawn to the right and secured by sutures between the oblique muscles. The aponeurosis was closed with continuous catgut suture. The skin was closed with catgut, supplemented by clips. The patient made an uninterrupted recovery and was dismissed January 30.

Case No. XLIII. Fistula In Ano. C. N., æt. 45, Leeville, Tenn. Admitted January 15 for relief of fistula in ano of several years standing. The probe showed a complete anal fistula, the external orifice of which was three quarters of an inch from the anus. Under A. C. E. the following day after entrance the fistula

was incised an a grooved director, the fistulous tract curetted and the wound packed with gauze. The patient made a rapid recovery and returned home ten days after the operation.

Case No. XLIV. Carcinoma of Breast. Mrs. C. B., æt. city. Admitted January 19. The unusual feature of this case was the freedom with which the diseased breast could be lifted from the pectoral muscle. Advantage was taken of this fact in operating. Under A. C. E. the breast was lifted and its base was trans-fixed, thus quickly removing the offending organ. The fascia was carefully dissected from the muscle, and although no glandular involvement could be detected the axillary space was opened. Its contents were apparently normal. The wound was closed with wormgut sutures and a dressing applied which confined the arm to the chest wall. The sutures were removed on the eighth day and the patient was dismissed February 15.

Case No. XLVIII. Adherent Prepuce. H. A., æt. 4, Goodrich, Tenn. Admitted October 12. This patient was quite nervous and at times extremely irritable, due to exacerbations of preputial inflammation. The orifice was greatly contracted and the urine passed with difficulty. Under chloroform a grooved director was guided over the dorsum of the glands to the corona and the prepuce was split. The adhesions were thoroughly divided and the redundant prepuce was removed. Catgut was employed to unite the mucous membrane to the skin. The wound was dressed with iodoform collodion.

Case No. LI. Tracheotomy. C. J., æt. 4, Robertson County, Tenn. Admitted January 25. This child, while holding a grain of corn in her mouth was tickled by an older child and the corn disappeared, followed by frequent severe coughing spells, during which paroxysms the child became livid. Under chloroform the trachea was opened, following the method of Bose, using a tenaculum to steady the thyroid cartilage while exposing the cricoid. The pretracheal fascia was divided transversely over the cricoid cartilage and was stripped down, exposing the trachea, the upper three rings of which were divided in opening the

trachea. The grain of corn was caught with very little delay and was removed. A silver trachea tube was put in place and dressing of gauze was applied. The patient coughed a great deal during the first few hours, until the trachea became accustomed to the pressure of the tube, which was removed at the end of twenty-four hours. The patient went home the fifth day.

Case No. LIV. Sequestrotomy. O. M. T., æt. 22, Fulton, Ky. Admitted January 23. This case presented a fistulous opening leading to carious bone in the left tibia, and gave a history of typhoid fever. Evidently there had been a severe osteitis, whether of typhoid origin or not. Under A. C. E. a free incision was made through the fistulous opening exposing a cloaca in the involucrum. This opening was enlarged and a large sequestrum was removed. The cavity of the involucrum was freely curetted and packed with gauze, saturated with balsam Peru. The cavity filled rapidly and the patient was dismissed February 21.

Case No. LVI. Appendectomy. Mrs. H. H., æt. 26, Paris, Tenn. Admitted December 10. After the usual preparation this patient, who had passed through several attacks, was anesthetized with A. C. E. and a three-inch incision was made in the right linea semi-lunaris, opening the sheath of the rectus, which was drawn aside and the posterior layer of the sheath and the peritoneum were divided. The appendix was delivered without difficulty. The meso was ligated with catgut and divided and the appendix was removed, the stump being buried by a catgut purse-suture. The wound was closed by the combined through and through and seriatim sutures. The wormgut sutures were removed on the seventh day and the patient was dismissed Dec. 30.

Case No. LVIII. Chronic Appendicitis. Mrs. H. A., æt. 29, Nashville, Tenn. Admitted January 19. This patient had suffered for several years from intestinal indigestion, with frequent attacks of abdominal pain, each attack leaving some tenderness in the right side. Under A. C. E. the abdomen was opened through the right rectus sheath and the appendix was readily delivered. The appendix was kinked on itself by adventitious

bands and was distended with pus. After severing the meso the appendix was removed. Some difficulty was experienced in invaginating the stump; it was buried by four Lembert sutures. The wound was closed by the combined seriatim and through and through method. The skin was approximated with silver clips. The patient made a satisfactory recovery and was dismissed February 7.

Case No. LX. Laceration of Perineum and Cervix. Mrs. J. M. C., æt. 36, Bakerville, Tenn. Admitted February 12. Frequent abdominal pains persuaded this patient to enter the Infirmary. The appendix was found thickened and tender. The cervix presented an extensive tear, as also did the perineum. The patient agreed to a repair of the cervix and perineum, but balked at the abdominal operation. Under A. C. E. the cervix was freely pared and the lacerations were closed by chromatized catgut sutures. The perineum was repaired by the method of Emmett, using catgut for the vaginal sutures and wormgut for the external closure. The perineal sutures were removed on the tenth day, the healing being satisfactory. The patient was still afraid to have appendix removed and returned home March 2.

Case No. LXII. Club Foot. Phelps Operation.—A. W., æt. 2. Davidson Co. Tenn. Admitted February 16. This patient presented a talipes varus of the right foot. Under chloroform the tendo achillis was divided subcutaneously and the heel was drawn well down. A transverse incision was made on the inner border of the foot and the medio tarsal joint was sought and opened. The plantar fascia required considerable division. The wound was packed with gauze and the foot was then held in an over corrected position while a plaster of Paris splint was applied. This was left for two weeks. On opening the splint the wound was found covered with healthy granulation. The plaster splint was reapplied for another two weeks, after which a light brace was used.

Case No. LXIV. Appendicitis. Interval Operation.—B. W., æt. 22, city. Admitted March 8. This patient had recovered

Selected Articles

STERILITY IN WOMEN.*

BY WILLIS E. FORD, M.D., Utica, N. Y.

The problem of the sterility of women is one that has not yet been solved by science. It is one of the oldest questions of a medical nature that has invited serious thought. Statistics show that one marriage out of every eight, among people who are apparently in good condition, fails of offspring. Just why these failures take place is accounted for by men with varying theories, and statistics seem to be of little value. From the nature of the case, statistics collected by men dealing with hospital patients, or with people who are in a social position that makes child-bearing a burden, and of a moral status that makes it probable that immoral and illegitimate means are employed for the prevention of conception, differ very much from those of men who see another class of people from the better walks of life, who desire children more than anything else in life, and yet who are unable to realize this desire.

There are a few cases of young women, who are apparently healthy and never had any serious illness, excepting menstrual pain and generally a troublesome leucorrhea, usually with an undeveloped neck of the uterus (what used to be called an infantile cervix with small canal) and these women are very liable to develop serious uterine disorders later in life. Sterility is one of these conditions, and I believe that many of the catarrhal disorders of the tubes, requiring serious pelvic operations later, are also developed without any other cause. It is of these few cases taken before any lesion of serious magnitude has been found, that I wish to speak.

* Read at the Annual Meeting of the Medical Society of the State of New York, April 28, 1914.

The younger men in our profession may not be consulted very much by people who earnestly desire children, and who feel shame in speaking of it. The age and social standing of the physician very materially changes his views regarding this question, because of the greater number of people consulting him who are anxious to bear children; while with the younger men the case is quite different, in that he may see more persons who desire to prevent legitimate pregnancy. I think that the statistics on this subject, therefore, are practically worthless, but I am convinced that men who have a good social standing, and recognized professional ability, see more cases of those who desire pregnancy than are thought to exist in a respectable community. The natural desire for offspring remains, and there are the same number of decent people who want to live wholesome lives, and yet who do not like to talk about it. If we say that statistics show that one marriage out of every eight, in which both parties are supposed to be in normal condition, fails of offspring, we can not draw a general conclusion from this fact that is at all trustworthy.

In the early stages of scientific gynecology the attention of the profession was largely towards conditions of the cervical canal, flexions, versions, and stenoses, that suggested operations upon the cervix and uterus, such as dilatations, divulsions, and the slitting of the lip of the uterus, in the attempt to straighten the cervical canal. It was found, however, that the scar tissue which was left after various surgical procedures about the cervix, often contracted, and was generally inelastic, and sometimes proved as much of an obstruction as the original deformity or disease, and the dysmenorrhea continued, or the sterility persisted. It was later the fashion to dilate and curette the uterus and pack it, on the theory of keeping the neck long enough to allow the exudate into the muscle that was divulsed at the region of the internal os, to stiffen and become permanently fixed in a nearly straight line, by the exudate which occurs from slight inflammatory processes caused by operations. It is quite probable that curettage was often done with such vigor that the endometrium was injured, and sterility actually produced.

It is within the observation of most men that a small contracted uterus with an unhealthy endometrium, follows a severe curetting—even though there was no evidence of septic infection at the time. Stem pessaries of various sorts were used to keep the uterine canal open, under the belief that after they were removed the canal would be patulous enough to permit pregnancy. But I have often wondered whether continuous pressure in the cervical canal would not produce those pathologic changes in the glandular mechanism against which they rest, sufficient to prevent the physiologic function of the organ. The theory of the cervical plug, because of the diseased condition of the so-called membrane lining the cervical canal, has been urged as acting like a stopper of a bottle, to mechanically prevent conception. I have not been able by any treatment that I have tried to convince myself that the cervical canal, especially if it was somewhat stenosed and small, could be made sufficiently normal so that this so-called mucous plug would not recur.

Under proper antiseptic precautions almost any kind of a surgical procedure can be carried out upon the neck or body of the uterus, without material danger to the patient; so that the experiments that have been tried are very numerous. When pelvic surgery by the abdominal route became so safe that one may almost say it became the fashion, great hope was entertained that the treatment of the tubes and ovaries in a so-called conservative way, would relieve many of these cases of dysmenorrheal sterility, independent of slightly abnormal positions and conditions of the uterus. One thing at least has been proved, that pregnancy occurs sometimes after such radical procedures about the adnexa as would seem to render pregnancy impossible. While these cases are rare, the number of cases that afterwards were found to conceive, on account of the conservative treatment of the tubes and ovaries, and the removal of adhesions, etc., has been disappointingly small. Advocates, however, of these radical measures point out the fact, that very small cervixes, almost infantile, with a very small canal, have been found to be capable of conception. May it not be said, however, that the natural physiologic changes that may occur in these organs—even when the organs themselves are

practically normal—may cause such tumescence of tissue as to act at times as a bar to pregnancy, and yet escape the observation of the gynecologist. I have no new theory to present in this short clinical paper, but desire to relate my personal experience in this matter, and to state how my attitude toward this condition has changed within the past few years.

When I heard Pozzi* read his paper five years ago it struck me that he advocated correct surgical procedure, and the permanency if the results which he claimed, commended it strongly to my mind. Throwing out, therefore, all those cases of former infections, or the possibility of irregularities of living, or lesions about the uterus and adnexa, otherwise than what was found by vaginal examination as depending upon the lower segment of the uterine canal, I began the operation in a limited number of cases, and have now a small number of cases, thirty-five, to report, with conclusions that seem to me worth while to present. It probably is unfair to compare these statistics with all the other cases where procedures were necessary on account of distinct lesions, or even where gross displacements have existed, which were relieved by other means, and they are not counted in this list.

One of the first cases was that of a man happily married seven years, and whose wife, soon after operation became pregnant, but has not conceived a second time.

The next case was that of a friend of mine, who also had been happily married some six years, for which she had been treated without any serious operative procedures beyond dilatation, douches, etc. It was two years after I operated her before she conceived. She had a small conical shaped cervix. She miscarried at the seventh month, and the accident was said to be due to hanging pictures, etc., during house moving.

One of the early cases, with a child now four years old, has miscarried twice since, at early periods, from what causes I could

* "Surgical Treatment of a Most Frequent Cause of Dysmenorrhea and Sterility in Women." Read before the Am. Gyn. Soc. by Prof. S. Pozzi, of Paris, France, in 1909.

not ascertain. She had been married seven years before operation.

Other reported cases of miscarriage called my attention to this danger, and I have not made the lateral incisions so deep as I did at first. Instead I have incised anteriorly any cicatricial ring found at the internal os, instead of cutting nearly to the internal os, and have packed the entire canal a little more firmly.

Three or four more pregnancies occurred, and then about a dozen were operated that have not yet reported pregnancy. All these cases without exception reported such improvement in function and in general health, that since then I have operated unmarried women in the same way. In these cases dysmenorrhea had persisted with interference in general health from this cause, and especially marked neurasthenic conditions were present.

At first I had no theory as to the reason why the general improvement in health, the loss of nervous symptoms, and the disappearance of local pain and leucorrhea, brought about such uniform results. I have come to think, however, that free drainage and the lessened tendency to permanent congestion is due to the fact, that after this the cervical canal is at all times open enough so that temporary swelling of the glandular structures, due either to the influences accompanying menstruation, or to the influence accompanying certain sexual impulses, which may or not be appreciated as such by the patient, is the reason for this improvement.

There is no question about the functional tumescence of glandular tissue, nor of the fact that it at times persists where the influences, either sexual or menstrual are irregular; and that with the subsidence of this tumescence there is glandular secretion, and that this secretion may be perverted by long continued tumescence, or by irregular and abnormally frequent impulses of this sort.

My examination of the cases months, and even a year after the operation, has shown that this procedure does permanently keep patulous the cervical canal; and that in most cases there is a normal secretion, and a normal appearance of the lips. There must have been some reason why a normally constructed uterus should have a fair sized cervix, and a quarter-inch canal, and a vaginal

cleft, making two lips to the vaginal portion. These cases of dysmenorrhea with perverted secretions, and sometimes with sterility, due to a small conical neck, with a round pin-hole opening, can be converted into a normal looking vaginal cervix by Pozzi's operation, and I believe that the true function of the uterus is in these cases restored in many instances.

As to the operation, it must be confessed that it is sometimes difficult to do, and requires more time than the average cervical operation requires. In my opinion the entire point of procedure is to cover any raw surfaces with mucous membrane, so that no scar tissue will follow. In making the slit on either side of the canal the important thing is to have it so that the anterior lip is as nearly as possible the same size as the posterior lip. The removal of a bit of muscle, or even of exudate tissue of each raw surface, so as to give room to bring the membrane over and cover in the spaces, is sometimes difficult to do. Pozzi uses a knife. I have found that very sharp pointed scissors are better. The catgut used is chromicised and very small. If much tension is put upon the stitches they tear out too soon, and it is usually necessary that a small sharply curved needle be used, to catch up a bit of muscle at the edge of the open cervical canal, in order to make the stitches hold.

To begin with the dilatation which precedes, need not be very extensive, because this operation is not of much use in septic cases; and it is presupposed that no sharp curette need be used; and if there is a cicatricial band at the internal os, it is incised forward to the anterior lip, and a very little iodoform tape is necessary to hold it open, while the two newly formed lips of the cervix are held apart, and surrounded by small straps of iodoform gauze. It is better to have the patient remain in bed three or four days after the operation, before leaving the hospital. Douches of boric acid used in the vagina daily for a week or ten days is necessary.

Formerly I was accustomed to use galvanism for a considerable period in these cases, to develop the uterus, after slitting the posterior neck and divulsion; and I have the history of many cases in which pregnancy followed, even after the lapse of a number of years of sterility. This treatment had to be carried on, how-

ever, for several months, and the results were good for a time; but I do not think they compared with the shorter and more simple procedure advocated by Pozzi, especially with respect to the permanency of results.

I have been at work long enough to follow the history of many young girls for ten years or more, and up to the time of their marriage, and even afterwards; and I am convinced that if early and complete drainage was secured through the uterus by this simple procedure in these few cases of cervical deformity, many of the serious conditions met with later in life could have been prevented and sterility may have been avoided in many instances. —*N. Y. State Journal of Medicine.*

CANCER CONTROL.

BY JOSEPH C. BLOODGOOD, M.D., Baltimore.

PRE-CANCEROUS LESIONS.

To improve the results, to increase the number of cures of cancer, there are two factors over which we have control—the duration of the disease and the treatment.

Long experience and investigation seem to show that cancer never begins in healthy tissue.

There is always a preëxisting local defect which is benign and in which later there may be a cancerous development.

When this previous defect is situated on the skin or beneath the skin or on the mucous membrane of the lip, tongue and mouth everyone is aware of the little lesion.

These previous defects or local lesions in which cancer may develop may be called precancerous lesions, the complete removal of these precancerous lesions will in my experience accomplish a cure in one hundred per cent of cases, that is, none of these people will die of cancer from a growth in the situation from which the precancerous growth has been removed.

Such cases can not be called actually cured of cancer, but we can be quite certain that such treatment prevents cancer in many if not all of the patients treated.

First, little tumors which may have been present since birth or noticed later in life. These little tumors may occur on the skin as warts, moles or navi. They may be felt beneath the skin as hard or soft nodules the size of shot, peas, beans or larger, or they may be felt deeper as in the breast, thyroid gland, deep in the neck.

Second, unhealed ulcer of the skin and mucous membrane. Here there may be a wound or a burn or some injury or disease which destroys the skin or mucous membrane. The wound never heals or heals badly and then breaks down, the open sore remains for weeks, months or years, often irritated by the patient. At any time, usually after months or years, cancers may develop in such ulcer.

Such ulcers are especially dangerous on the tongue, a week's delay here is equivalent in danger to six months' delay for a like ulcer on the lip.

Third, some form of chronic irritation of the skin and mucous membrane which does not actually destroy it. For example, chronic inflammation and irritation about bad teeth (cancer of the gum never develops about clean teeth). Inflammation and irritations of the mucous membrane of the mouth, lip or tongue in smokers, from chewing tobacco, or from snuff. This tobacco irritation may lead to the formation of white patches (leucoplakia) or ulcers, or thickening of the mucous membrane. Cancer at any time may develop in these areas of irritation.

All of these precancerous lesions, tumors, unhealed ulcers, areas of chronic irritation and inflammation of the skin and mucous membrane are recognized by their hosts the moment they begin. Delay in treatment is due to ignorance, fear or skepticism.

As stated before, treatment in this early precancerous stage, if proper treatment, should accomplish a hundred per cent of permanent cures.

Any treatment which does not completely remove the little tumor or accomplish healing of the ulcer, or completely excise the ulcer, or stop the irritation of the skin or mucous membrane, or any treatment which does not completely excise the ulcer the result of the irritation is more dangerous than no treatment at all.

In this stage good surgery should give one hundred per cent cures.

In this stage bad treatment is dangerous. Far better to delay for good treatment than subject one's self to bad treatment in this stage.

Bad Treatment is incomplete removal of the little tumor or ulcer. Irritating treatment which does not completely destroy the cells in the tumor, ulcer or area of irritation. Such irritating treatments are: application of caustics, curetting, improper use of X-rays and radium, and carbon dioxide snow.

Bad Treatment. These precancerous lesions may in some cases be completely destroyed by the application of caustic salves, or curetting or X-ray or radium, but with such treatment a piece is rarely, if ever, saved for microscopic study.

This treatment is dangerous, first, because it may be incomplete; second, there should always be a microscopic study of a piece of the precancerous lesions, because in some cases cancer develops very quickly and can only be recognized with the microscope.

It takes less time to completely excise such precancerous lesions with a knife (combined with the actual cautery in some cases, in certain localities, for example, the tongue). The operation in most instances can be done under cocaine without pain or discomfort. With good surgery the scar will always be the least possible after any method of treatment.

With such proper surgery a piece of the lesion excised may always be studied at once with the microscope, and the possibility of an early development of cancer recognized. This in some cases would lead to an immediate more radical operation.

My investigation over a period of 20 years with almost 3,000 cases, demonstrates that in cancer in accessible regions like skin and mucous membrane of mouth, lip and tongue, and subcutaneous areas, that is with palpable nodules, ulcers and areas of irritation teaches that good surgery in this pre-cancerous stage should accomplish a hundred per cent of cures, because this early recognition and treatment leads to the complete eradication of the precancerous lesion still benign, or to the recognition of the

earliest stage of cancer by the microscopic study of the piece excised, and thus leads to the radical operation indicated at a period most favorable for the cure of cancer.

Precancerous lesions in the internal organs are difficult to demonstrate and will not be discussed in this paper, but I agree with William and Charles Mayo, and others, that gastric ulcer and the chronic irritation of gall stones and inflammation of the gall-bladder should be looked upon as pre-cancerous lesions and lead to good, appropriate surgical treatment in the earliest stage of the disease. This treatment will be indicated by what the patients complain of, because rarely, if ever, can a tumor or ulcer be felt.

The great hope for increasing the number of cures of cancer, and decreasing the number of deaths from cancer lies in the education of the public, and the profession on the significance and potential danger of the precancerous lesion; the education of the surgeon as to the best surgery and the education of the surgeon and the pathologist as to the recognition of the earliest stage of the beginning of cancer in the being precancerous lesion.

The excision of the precancerous lesion has the great advantage of allowing a microscopic study. There is no other way of excluding the possibility of cancer.

The short duration of the precancerous lesion does not exclude cancer. The long duration does not indicate cancer.

The microscopic investigation not only leads to a decision whether it is cancer or not, but if it is cancer, to the type of cancer. These microscopic diagnoses in the precancerous lesions, benign, early cancer, type of cancer, lead to immediate operations, which in some cases are radically different types of cancer.

Any treatment, therefore, which does not allow the examination of a microscopic section is not devoid of danger, and is not the best treatment.

The best results therefore in the precancerous stage, where the factor of the duration of the disease is controlled rests upon good surgery, and good pathological diagnosis.

To repeat, incomplete treatment in this earliest stage often yields worse results than complete treatment in a later stage.

The following results illustrate the relation between the probability of a permanent cure and the duration of the disease when surgery is equally good.

These figures are based upon the per cent of patients who have lived five years or more after the operation without any signs of return of cancer.

In the least malignant forms of cancer of the breast, called adeno-carcinoma, there are 35 patients cured five years or more after operation; this is 76 per cent.

In this group there are 15 patients who came for treatment so early in the disease that a diagnosis could not be made until at the operation when the lump was explored. The diagnosis having been made, the complete operation followed immediately. Every one of these patients have remained well five years or more, that is 100 per cent of cures have been accomplished when the operation has been in the early stage in less malignant forms of cancer of the breast.

In the same form of cancer there have been 20 patients who came for treatment late. Here the diagnosis could be made at once. The same complete operation was performed, the per cent of cures is but 64 per cent.

Results, therefore, in the less malignant form of cancer of the breast can be expressed as follows:

All cases (35) 76 per cent of cures.

Early cases (15) 100 per cent of cures.

Late cases (20) 64 per cent of cures.

The figures 35, 15 and 20 represent the actual number of cured patients, and not the total number subjected to operation, except in the group where was 100 per cent of cures.

The results in the more malignant form of cancer of the breast show the same difference in the results between early and late cases as follows:

All cases cured 92, or 36 per cent.

Early cases 12 cured, or 85 per cent.

Late cases 80 cured, or 33 per cent.

Any woman who has a lump in the breast immediately operated upon has the best chance of a permanent cure. If the lump proves

to be the less malignant, adeno-carcinoma, her chances are 100 per cent; if it is the more malignant medullary or scirrhus carcinoma her chances are 85 per cent.

No one can influence the character of the tumor. This is a factor over which we have no control, but if a woman subjects herself to operation at once for a lump in the breast her worst chances are at least 85 per cent, with a possible 100 per cent. If she delays until the surgeon can tell it is cancer her best chances are 64 per cent if the tumor proves to be adeno-carcinoma; in the more malignant form of cancer, 33 per cent.

The danger of delay is really greater than this, because during this time, the cancer may grow so that no radical operation can be performed. This stage of affairs was present in 27 per cent of all cancer cases.

The per cent of cures for all cases of cancer in which complete operation could be done and in which the period of time since operation is five years, is now 42 per cent. Five years ago it was only 35 per cent. This improvement is due to the fact that women are coming earlier for treatment.

Every woman should know that if she submits to proper treatment within a few days after she feels a lump the chances are one out of three that the lump is not cancer, and the proper treatment will yield 100 per cent of cures. If the lump is cancer, her chances are one out of four that it is the least malignant form of cancer with a possible chance of 100 per cent of cures. At the worst with cancer in this stage the chances are 85 per cent.

Delay, if the tumor is benign, is risky, because at any moment the benign tumor may become cancer. If the lump is cancer when first observed every day's delay must decrease the probability of a cure. Absolutely nothing can be gained by delay.

The difference is the result between complete and incomplete operations for cancer of the breast.

This is best shown in the results after complete operation in the early stages where the probabilities of a cure are best.

In the less malignant adeno-carcinoma there are 11 cases in which it is five years since are incomplete operation, with but one cure (9 per cent.) We have just shown that after the complete

operation in the same state for tumors of like character there are 15 five-year cases with 100 per cent of cures.

For the more malignant type of cancer there are 17 five-year cases without a single cure after incomplete operation. This should be construed with results in the same type of tumor when the operation had been complete in this early stage.

Thirteen five-year cases well, 76 per cent.

We may summarize the results as follows:

Operation in the earliest stage when the diagnosis of cancer can not be made except when the lump is explored.

Adeno-carcinoma, complete operation, 15 cures—100 per cent.

Adenoma-carcinoma, incomplete operation, 1 cure—9 per cent.

More malignant carcinoma, complete operation, 13 cures—76 per cent.

More malignant carcinoma, incomplete operation, 0 cures, (17 cases).

By incomplete operation I mean excision of the lump or breast and later, days or weeks, after the microscopic diagnosis of cancer, the complete operation. We have only one positive cure. In this case the entire breast was removed and nothing further was done.

These figures absolutely prove the importance of a complete operation in the early stage of cancer. Incomplete operation gives worse results than delay with complete operation when the diagnosis can be made without the aid of the microscope.

The properly educated surgeon should always be able to diagnose the early cancerous lump of the breast and perform the complete operation immediately after the exploration, giving the patient the best chance of a permanent cure—from 85 to 100 per cent.

CARCINOMA OF THE LOWER LIP.

The following figures show the influence of delay and incomplete surgery.

1. Benign lesions of the lip, 8 five-year cases, 100 per cent cures.

These are precancerous lesions. In every case the microscopic examination showed no evidence of cancer, but these are the le-

sions that the patients who came for treatment with fully developed cancer of lower lip tell us about as being the little nodule or sore wart which they had observed on their lip for weeks, months or years before the non-resent fully developed cancer showed itself.

2. Lesions of the lip which to sight and touch seem benign, but which under the microscope prove to be early cancer, 9 cures—90 per cent.

The failure to cure in the one case was due, I am sure, to an incomplete operation on the lower lip.

In these two groups it is not necessary to do more than excise the lesion on the lower lip.

3. Fully developed cancer of the lower lip.

When we have removed the lower lip only and not removed the glands we have cured by 7 patients, or 63 per cent. The failure to cure in 4 cases was due to the involvement of the glands under the jaw.

When the complete operation was performed, that is excision of the lesion on the lip and the glands of the neck, there have been 20 five-year cures, or 95 per cent (in cases where these removed glands showed no positive evidence of cancer). If the evidence of cancer was made out by the microscope there are but 6 five-year cures, or 50 per cent.

If the lesion of the lip has had previous treatment and had recurred on the lip, and the recurrence is microscopically cancer, the probability of a cure in the three groups is reduced from 63 to 20 per cent, 95 to 60 per cent, and 50 to 20 per cent. That is, operation for recurrent cancer of the lip reduces the probability of a cure at least 42 per cent.

Similar figures can be duplicated with lesions of the tongue, face, skin of the body and extremities. The same investigation is now complete with over 1,000 lesions of the skin and mucous membranes. These tables will be published later.—*Med. Sentinel.*

Extracts from Home and Foreign Journals.

SURGICAL

SPONTANEOUS RUPTURE OF THE HEALTHY ESOPHAGUS.

I. J. Walker states that this condition is most frequently seen in men who are addicted to alcohol. In practically every case rupture has followed vomiting or retching after an abnormally large meal. The point of rupture in every case has been just above the diaphragm. Difficulty in making an early diagnosis in this condition is due to the fact that the symptoms are referred to the upper abdomen and not to the esophagus. The patient is in a state of marked shock with subnormal temperature, high pulse, profuse sweating, and some cyanosis. The respirations are usually slightly elevated. The face is drawn and anxious and the patient lies or sits with the knees drawn upward. Pain is referred to the epigastrium and lower chest, either on the right or left, but usually the latter. There is marked tenderness and board-like rigidity throughout the upper abdomen. Chest examination may show a few rales at the base and sometimes hyperresonance or flatness on percussion, depending on whether there is much air or fluid in the pleural cavity. The picture up to this time is that of acute perforation of a gastric or a duodenal ulcer or acute pancreatitis. As time goes on, and especially if the patient has swallowed any liquid, the symptoms point more to some chest condition. The respirations become rapid and shallow, and the temperature elevated. The chest signs become more pronounced and the heart pushed towards the right, and the area of heart dullness practically obliterated. Aspiration of the chest will reveal fluid and gas. If the former is examined microscopically, food particles may be distinguished. In some cases there will be emphysema of the chest and neck. Very little except palliative measures can be found in the literature concerning treatment of this condition. It does seem possible that should the

diagnosis be made early, there might be some chance of saving the patient by approaching the lesion through the posterior mediastinum, repairing the rent, and draining the mediastinum and pleural cavity.—*Medical Record*.

RIGIDITY OF THE ABDOMINAL WALL.

Roux emphasizes the necessity for discriminating between the sudden, circumscribed and transient contraction of the muscles, forming the "muscular" defense," and the true and persisting contracture forming the "wooden" abdomen; with the latter the patient seems to be trying to hold his abdomen rigid even against his will, and nothing can simulate or arrest it. The "wooden" abdomen is the extreme degree of the "muscular defense." It imparts no decisive information as to what is going on below, and after an accident to the abdomen it is of no practical importance, as a rule. But when the abdominal wall grows suddenly hard as a board, without an accident to explain this, it suggests intense irritation below, generally of chemical origin, from perforation of the stomach or upper bowel. It was not evident in a number of his cases of spontaneous hemorrhage in pancreas or adrenals and he noticed it only once, and then very slight, with extra-uterine pregnancy, torsion of genital organs, appendicitis and spontaneous rupture of the rectum. As it is the exception which tests the rule, he concludes by reporting a case in which intense pain throughout the abdomen and kidneys and the persisting rigidity of the abdominal walls compelled a laparotomy. Nothing pathologic was found in the accessible organs but the symptoms subsided. Another attenuated attack seventeen days later terminated in the expulsion of three small kidney stones, since which time there has been no further disturbance.—*The Journal of the American Medical Association*.

EXTERNAL MALLEOLUS, TREATMENT OF FRACTURES OF.

The excision of small fragments of bone involving articular surfaces has given the author such good results in the case of the

shoulder, elbow, and wrist-joints that he determined to try it in cases of fracture of the external malleolus. Among the cases presented is that of a woman aged 40 with an oblique fracture of the fibula involving the malleolus. In spite of careful adjustment of the splints the patient complained of great pain, which continued for several days. On the tenth day after the accident the author exposed the external malleolus by a rectangular incision and, after detaching the external lateral ligament, removed the whole of the external malleolus. The foot was placed at a right angle to the leg and adjusted on a back splint. Next day the patient was comfortable and free from pain. In ten days the wound healed; on the twelfth day she could stand on the foot without pain, and on the fifteenth day went to a convalescent home. Three months later the patient could walk and move about on the injured foot easily, safely, and without pain or stiffness.

This and other cases are good examples of the ease and rapidity with which patients recover after excision of an external malleolus detached by accident. The results are much better than those obtained by the older method of rest or the application of splints, and far better than the repair which follows the newer method of wiring—Sir John Bland-Sutton (*Lancet*, Feb. 7, 1914.)

MEDICAL

THE AERIAL CONVEYANCE OF INFECTION.

F. H. Thomson and C. Price treated certain infectious diseases in an ordinary ward with the precautions of cloak-wearing, cleanliness, and sterilization. They believe that the infection of measles is probably airborne early in the disease, but that the power of infection soon passes. They also believe that the infection of chickenpox is air-borne early in the disease, but their experience goes to suggest that on and after the third day it is probably not air-borne in their view this probability is the most interesting outcome of the work. For many years the authors have held that

diphtheria infection is not air-borne. No cross infections arose from German measles or from mumps, but the small number of cases treated scarcely warrant any definite conclusion. On the whole, however, from this and previous experience in other wards, the authors tend to the view that these diseases are probably not airborne.—*Medical Record*.

COLLOIDAL SILICON IN THE TREATMENT OF SIMPLE GOITER.

Report of the case of a young girl whose neck enlarged rather suddenly after she had danced all evening at a ball. The right lobe was especially hypertrophied, pushing forward the sternomastoid muscle. There were no signs of exophthalmic goiter. A series of 4 injections, each consisting of a 3-c.c. ampoule of colloidal silicon, was given at four-day intervals. No pain followed the injections. After the third injection the thyroid became softer and dyspnea was relieved. After the fourth, the neck circumference was less by 3 c.m. Two weeks later, after two more injections of the colloidal preparation had been given, the neck measure diminished 2 cm. further, practically to its normal circumference. Silica had already been used in simple goiter, but not in the colloidal state. The author is convinced that the injections were beneficial in this case and advises a trial of colloidal silicon in both simple and exophthalmic goiter before resorting to operation.—Suard (*Presse Medicale*, October 18, 1913).

INSOLATION.

Treatment of an attack of insolation, Woolley says, combines refrigeration with elimination, both active enough to produce good effects without embarrassing organs, such as the heart, which are already damaged. To accomplish the former the practice is to give ice cold packs or baths. To compass the latter recourse is commonly had to stimulants. This latter in Woolley's opinion seems not to be best, except as a last resort. Stimulation of an already burdened organ can do little good and much damage. Hydro-therapeutic methods he believes are of more value

in insolation than drugs. Ice packs or iced baths have a great value, but should not be continued for more than a few minutes at a time and should be discontinued when the rectal temperature has reached 104 F. To replace the water lost to the body before the attack, and to increase elimination, there is no better method than infusion of saline solution. If it is true that the oxygen content of the body is low and the acid content high, then such solutions should be alkaline. Woolley believes that such alkaline solutions as those recommended by Fischer are extremely efficacious, whether given by rectum or intravenously, in neutralizing the acids of the body and increasing water elimination by the kidneys. The solution for rectal use he urges should be prepared as follows:

Sodium chlorid	30 gm.
Sodium carbonate (crystalized)	20 gm.
Water	1,000 c.c

The injection should be given slowly enough to allow retention. The time consumed in injecting a liter should not be less than one hour.

For intravenous injection the following solution may be used:

Sodium chlorid	14 gm.
Sodium carbonate (crystallized)	10 gm.
Water	1,000 c.c

This also should be given very slowly.

The effect of these solutions on the secretion of urine, Woolley states, is remarkable, and as a rule they will make it unnecessary to use digitalis. When this latter drug is used, it should be very carefully administered and its effects carefully watched. The use of strychnin is not advised in the active stage of the disease.

Such treatment will dispose of the immediate danger, and when this has been done treatment is symptomatic. In apyrexial heat exhaustion external hydrotherapeutic measures are uncalled for, and treatment should be eliminative and stimulative. The internal hydrotherapeutic methods should be very useful in these cases and should be combined with friction, massage, warm packs with sufficient internal stimulant medication. After recovery from an

attack of insolation great caution must be observed by the patient to prevent recurrences from subsequent exposures to heat.—*The Journal of the American Medical Association*.

THE ROLE OF THE FLEA IN THE TRANSMISSION OF PLAGUE.

A recent report of A. W. Bacot and C. J. Martin, of the Lister Institute, England, gives, as the result of a painstaking study, the mechanism by which the flea becomes the infector of the rat with the bubonic plague and presumably also of the human being, who is so unfortunate as to afford a feeding ground for the infected insect. Under conditions which precluded other modes of infection, Bacot and Martin fed fleas upon infected animals and then transferred them to healthy rats. The remarkable lesson in comparative anatomy, physiology and pathology which unfolded itself is best told in their own words, as follows:

"It was found that two species of rat fleas, *Xenopsylla cheopis* and *Ceratophyllus fasciatus*, fed upon septicemic blood, can transmit plague during the act of sucking, and that certain individuals suffering from a temporary obstruction at the entrance to the stomach were responsible for most of the infections obtained, and probably for all. In a proportion of infected fleas the development of the bacilli was found to take place to such an extent as to occlude the alimentary canal at the entrance to the stomach. The culture of pest appears to start in the intercellular recesses of the proventriculus and grows so abundantly as to choke this organ and extend into the esophagus. Fleas in this condition are not prevented from sucking blood, as the pump is in the pharynx, but they only succeed in distending an already esophagus, and, on the cessation of the pumping act, some of the blood is forced back into the wound. Such fleas are persistent in their endeavors to feed, and this renders them particularly dangerous. Fleas suffering from obstruction do not necessarily perish, and in course of some days the culture obliterating the lumen of the proventriculus may autolyse and the passage again become pervious. They are, however, incapable for the time being of imbibing fresh fluid, and are, therefore, in danger of drying up if the tempera-

ture is high and the degree of saturation of the atmosphere low. Although, as far as our observations go, they withstand dessication quite as well as normal fleas which are not fed, their length of life must be short directly hot, dry weather sets in, and we are led to wonder whether this fact may not, to some extent, explain why in India epidemic plague is confined to the cooler and moister seasons, and particularly why in Northern and Central India the epidemics are abruptly terminated on the onset of the hot, dry weather.—*The Lancet-Clinic*.

CALOMEL AS A BABY'S MEDICINE.

W. T. Marrs, in the *Physicians' Drug News*, thinks that mercury, in some form, is the best baby medicine we possess. Ordinarily, calomel is the best form by which to administer it. In some types of bowel trouble, especially those accompanied by a diarrhea, mercury and chalk is an excellent combination. In coughs and bronchial irritations calomel and ipecac is one of the best combinations that can be given.

There are few baby ailments in which calomel, judiciously administered, will not accomplish certain good results. It acts upon every secreting gland and cell, and is the most valuable cholagogue we possess, although acting indirectly as about all such agencies do. Calomel is,, therefore, a most valuable intestinal antiseptic and is indicated in the majority of gastro-intestinal affections.

Occasionally a child manifests an idiosyncrasy for calomel and many manifest the same by overstimulation of the intestines, resulting in griping, tenesmus, etc. This is rare, however. As a general rule children tolerate relatively large doses, the reason being that the young child's secretions are more copious and mobile than that of an adult. Much of it is "lost" before it can exert any physiological effects. Young children, says Marrs, are not subject to ptialism, and I have seldom had a child under the age of ten to manifest sore gums after taking the mild chloride of mercury.

The 1-10 grain tablets of calomel and wintergreen are all right for infants. They are also good for children a year old or more, provided enough are taken. I give it to children a year old in one-grain doses and seldom in less than one-half grain doses. Having for twenty years depended on this drug as my one to "swear by" in babies, I have never had reason to "swear at" it. I have learned to give children calomel in free doses, and I have never yet seen untoward results from my method of administration.

When it is desired to impress the young child's system with mercury, as in granular affections, it is well to administer calomel in small doses, say 1-10 grain. I can't see how any smaller doses can exert any benign therapeutic effects. Calomel and castor oil are the best baby medicines, although, like babies themselves, they are old-fashioned.—*The Medical Brief*.

TUBERCULOSIS OF THE PULMONARY LYMPH NODES AND SPINE MISTAKEN FOR CROUP.

M. A. Michaelvitch (Pediatria, St. Petersburg, Vol. IV, No. 1) calls attention to the fact that symptoms of stenosis of air passages may be caused by pressure of tuberculous bronchial lymph nodes, and it is very important to differentiate stenosis of this kind due to outside pressure and not mistake it for croup. Michaelovitch discusses this question from various points of view, including the etiologic, bacteriologic, pathologic, anatomic, clinical, the course, etc. He comes to the conclusion that frequently, especially when the case is urgent, the differential diagnosis can be partly guessed from the general appearance of the patient, history, percussion, auscultation, etc., but mainly from the fact that in stenosis from tuberculosis the dyspnea or stenotic respiration occurs during both inspiration and expiration, while in croup it is inspiratory alone. The stridor may increase from crying, coughing, etc., and closely resemble that in laryngeal diphtheria. As it is impossible in an urgent case to exclude diphtheria, he recommends as a prophylactic measure intubation and injection of antitoxin. Later, exact differentiation can be made through

proper clinical, bacteriologic and especially roentgen-ray examinations.—*Pediatrics*.

BRIGHT'S DISEASE TREATED WITH POTASSIUM NITRATE.

I have treated over thirty cases of Bright's disease in the last year successfully with potassium nitrate. I will give a short history of eleven:

First—F. E., barber, 51; drinks occasionally a glass of beer. Urine analysis: December 13, albumen, blood, granular, hyaline and waxy casts; December 16, albumen, blood, no casts; December 25, albumen; December 31, trace of albumen. The next three months sometimes normal, sometimes a trace of albumen. April, urine normal.

In the following four years the urine was normal. Patient died from tuberculosis not long ago.

Second—K. S., musician, 63. October 18, albumen, uric acid, blood, hyaline casts, pus; October 22, trace of albumen, uric acid, no blood, no casts, no pus; October 27, uric acid, no albumen, no blood, no casts.

Third—M. W., baker, 48; drinks moderately beer. September 19, albumen, uric acid, blood, hyaline and waxy casts; September 25, albumen, uric acid, blood, casts; October 5, no casts, no blood, uric acid, trace of albumen.

Fourth—Wm. B., car conductor, 51; drinks moderately beer. January 17, albumen, blood, hyaline and waxy casts; January 20, albumen, no casts, no blood. Patient did not return for treatment.

Fifth—C. S., shoemaker, 71; drinks moderately beer. March 19, albumen, uric acid, blood, hyaline and waxy casts; March 26, albumen, uric acid, no blood, no casts; April 1, trace of albumen; April 20, urine normal. An examination two years later: urine normal.

Sixth—Ch. L., saloonkeeper, 50; potator. April 6, albumen, hyaline and waxy casts; April 13, albumen, no casts. Went to Europe.

Seventh—Mrs. L., 49; abstinent. February 7, albumen, hyaline and granular casts; February 15, albumen, no casts; February 22, albumen; February 29, albumen; March 10, albumen; March 20, albumen; April 9 to April 25, trace of albumen; May 18, normal.

Eighth—Wm. B., cigarmaker, 63; drinks moderately beer. April 2, albumen, hyaline and granular casts; April 17, trace of albumen, no casts; May 15, normal.

Ninth—G. R., physician, 72; is suffering from Bright's disease more than ten years. March 25, albumen 0.5 per cent, hyaline, granular and waxy casts; April 8, albumen, few hyaline casts; April 22, albumen, no casts; June 7, 0.08 per cent albumen. Discontinued potassium nitrate. June 20, 0.3 per cent albumen, few hyaline casts. From June 21 took regular potassium nitrate. July 8, albumen 0.2 per cent; July 15, albumen, 0.15 per cent. Took occasionally potassium nitrate up to September 15. September 15, albumen 0.15 per cent. Took regularly every two hours potassium nitrate. September 26, albumen 0.08 per cent.

Up to date patient takes potassium nitrate one to two times a day, and his urine is free from casts and albumen from 0.08 per cent to 0.09 per cent.

Tenth—S. K., artist, 68 years. December 13, hydrops of both legs and scrotum; urine—albumen, hyaline, and granular casts.

R̄ Prisnitz applications, changed every six hours.

Elevated position of legs. Potassium nitrate, 15 grains every two hours. Light diet; four milk punches with egg a day.

December 17, hydrops disappeared; patient can sit up in chair, with legs elevated; December 20, few hyaline casts, trace of albumen.

R̄ Potassium nitrate, every two hours, 15 grains.

Light diet; four milk punches with egg a day.

December 29, no casts, no albumen, patient can walk about; January 3, urine normal, potassium nitrate 15 grains three times a day; January 10, urine normal, potassium nitrate 15 grains three times a day; January 24, urine normal. Patient discharged.

Eleventh—H. N., druggist, is suffering from Bright's disease over ten years. April 5, concentrated urine, granular casts, albumen 0.7 per cent.

R Potassium nitrate 15 grains every two hours;
light diet.

April 10, albumen 0.15 per cent; April 17, few granular casts; May 25, few granular casts, albumen 0.1 per cent. The same treatment.

The dose of potassium nitrate is 0.5 to 1.0 dissolved in 20.0 aqua every two hours till the casts disappear and the albumen is reduced to a trace, then the same does three times a day and several weeks after the urine is normal. Potassium nitrate does not disturb the stomach or the intestines, and has no bad effect on the patient. It acts in some cases constipating, and this action has to be neutralized by a natural aperient water taken every morning.

If hydrops is present, I found the most successful treatment "Prisnitz applications," with elevation of the legs over the level of the pelvis.

The diet: Mostly vegetable and farinaceous food, meat sparingly once a day, buttermilk, milk, milk and eggs, with or without liquor.

Under Bright's disease I comprehend chronic and acute nephritis with presence of albumen and casts in the urine.

I will not claim that the disease is curable in the last stages, but I am convinced that it is possible to stay the disease and prolong life.

In cases 1, 3, 5, 7, 8 and 10 was hydrops present.

Case 9 is of ten years' duration. The action of the remedy is made very clear in this case. Till June 7 the albumen was reduced to 0.08 per cent. In the two following weeks the remedy was not taken and the albumen increased to 0.3 per cent., with the reappearance of hyaline casts. In the next three weeks of treatment it went down to 0.15 per cent, and the casts had disappeared. Up to September 15 the patient took occasionally the remedy and the albumen did not increase. Then the patient took potassium nitrate regularly every two hours, and September 26

the albumen was down to 0.08 per cent.

I had intended to collect more material before publishing my experiences, but on second thought in consideration that the death rate of Bright's is the highest next to tuberculosis, it being 75 per cent of the latter, I would consider it a crime against humanity to delay the publication any longer.—*Maryland Med. Jour.*

OBSTETRICAL

RECORD OF A FRENCH CASE OF FEMININE SEXUAL INVERSION.

The study of the phenomenon of sexual inversion as manifested by women is still too young to justify any very diadactic conclusions. The most valuable material bearing on some of the problems involved which can be presented consists of accurate and reliable case reports of which there have been far too few recorded.

With the belief that an accurate report of this kind will be found more interesting and more illuminating than generalizations, I venture to present a translation of an unusually instructive case record.

The observers, Dupony and Delmas, report as follows:

"When one speaks of homosexuality one thinks almost always of masculine amours. But *uranism* is far from being an attribute of the male sex only; on the contrary, feminine inversion is quite as frequent as masculine. It is, however, more easily concealed, but, on the other hand it finds means for its satisfaction with greater difficulty, often hesitating to break through the restraints of social conventions and innate modesty. Some conspicuous examples, however, bear witness that this is not always the case.

"We wish to report today, following out the observation of a case of masculine inversion presented at the preceding session, on two cases of feminine inversion, and we shall endeavor in pre-

senting them to show the constitutional character of this perversion as it is regarded by Magna, Garnier, and Arnand.

"Jeanne M., dressmaker, twenty-four years old, came to the clinic on October 20, 1904, with the following record registered by Dr. Legras: 'Melancholic delirium, based on mental debility. Auditory hallucinations. *Blesité* imaginary fears. Partial mutism. Says that she is persecuted by everyone; that her mother wishes to kill her and throw vitriol at her. Voices speak to her of death, etc. She came to the *commissariat de police*, declaring that there had been stolen from her savings-bank book, and making incoherent remarks.'

"Neither her ravings nor her hallucinations interest us; we wish to speak only of her homosexual tendencies. She made to us in effect an avowal of a passion which she entertained for her patroness. She loved her in a most extravagant fashion, to the point of not being able to work when she saw her or heard her in the workroom. She would be obliged to stop her work to admire in silence.

"She presented her infatuation to us as a spiritual affection, psychic only, and erotomaniac in consequence, affirming that she experienced no sexual sensations regarding her patroness. 'The love for me,' she declared, 'is not physical love; it is admiration. It is not sensual love; it is mystic love. It is her appearance which pleases me. I would never have thought of sleeping with her. I would have been ashamed of that * * *'

"Nevertheless, when pressed by precise questions, making her enter into the details of her history, it was possible to discover the sexual attraction and the physical desire.

"She was jealous of the husband of her patroness, and informed herself, according to her comrades in the workroom, regarding the intimacy existing between a married couple. One of the girls having said to her one day, 'that the patroness did not love her husband and no longer had relations with him,' she felt much relieved from the painful thought which had been torturing her, and she took infinite joy in this item of information. She would have been glad if conjugal intercourse had never taken place and

would have gladly imagined this and persuaded herself of this belief had not a daughter, alas, been born of the marriage, thus proving beyond refute the existence of such relations.

"Her love was so violent that she was brought completely under the control of her beloved. She submitted in a docile manner to her least caprices, she obeyed her blindly whatever she might be ordered to do. 'This woman,' she told us, 'makes me do whatever she wishes. If she asked it of me, I would steal, I would undertake violence, I would commit suicide, on condition that she might be with me.'

"She had not dared to declare these sentiments to her patroness, but the silent sorrow of her love was poured out in stifled cries, in ardent letters laboriously written and never sent. This was the substance of them: 'Madame, I love you with an unspeakable love, I am capable of all madness to please you, etc. *
* * *

"Her modesty finally permitted one last confidence. She would have been gladly willing 'to go' with her if she (the patroness) had proposed this to her. She would have been glad to give her pleasure. Personally, however, she was content 'to contemplate.'

"In our opinion, Jeanne M. is a decided invert, a constitutional uranist; and her inversion is not purely platonic, erotomaniac in some way, that is to say, accompanied by a sexual anesthesia; but, on the contrary, frankly sexual and endowed with a taste for the voluptuous act. Not only does she feel herself attracted towards another woman, from whom she would wittingly accept voluptuous caresses, but she also entertains a vigorous repugnance to heterosexual relations. Men did not please her, she said, and never had she consented to the intimacy of a man; intimacy she would gladly permit to a woman, even a woman other than her patroness.

"The passion described has not been, however, her only love affair. Jeanne M., before her patroness, had loved other women in the same manner; her last love is only, she assures us, the most ardent and engrossing. To be accurate, therefore, it is not a woman—an individual—whom she loves, but woman in general, her entire sex.

"Jeanne M., on the other hand, an anonist since the age of sixteen, is a virgin. She had never experienced, according to her statement, other than solitary practices; she had never submitted to relations with others. Her original timidity, her inherent modesty—the decrement of which even she herself had earnestly desired, had never been actually broken down, and it is this which explains the restraint of her senses, the apparent absence of physical desire, and the concept of an ideal love, mystic and exclusively theoretical. Had one experience thrown her into the arms of a lesbian, it is certain she would have enjoyed the voluptuousness of their embraces. The attraction of servitude to her patroness, the desire of obeying her meekly, the need of feeling dominated by her—all these appear to us as sexual characteristics of her love."

The authors comment that the subject of this case was evidently a simple invert.—*Maryland Medical Journal*.

DYSPAREUNIA AND ITS SURGICAL TREATMENT.

Phillips notes that quite a number of women suffer more or less severe pain during coitus, that this condition underlies many a case of otherwise unaccountable neurosis, and that it nearly always depends on some pathological lesion which, if properly diagnosed and treated, can generally be cured. The cause may be an unruptured hymen, a hymenal fissure, kraurosis vulvæ, or vaginismus. Dyspareunia associated with vaginismus is by far the most difficult condition to relieve. The author has never been able to cure a case in which it has persisted for several years. The treatment includes: (1) A cure of any obvious pathological condition. (2) Forcible and very thorough stretching of the genital passage under full anesthesia. (3) Lubricating and anesthetizing the vagina by glycerin and cocaine prior to coitus. Other causes of dyspareunia are a retroflexed uterus, a prolapsed ovary, an ovarian cyst, ovariosalpingitis, and parturition trauma.—*Medical Record*.

OBSTETRIC HEMORRHAGE.

Jung remarks in the course of this article that with placenta prævia extraction should never follow version immediately unless the os is completely dilated. Otherwise the cervix is liable to tear and this is extremely dangerous with placenta prævia. It nearly always entails severe hemorrhage, and it is almost impossible to suture the tissues. He says of cesarean section with placenta prævia that it must be reserved for institutions. In the home, constriction of the waist with a rubber tube, suspenders or rope, according to Momburg's technic, has often proved a life-saving measure both with placenta prævia and premature separation of the normally situated placenta.—*Journal of the American Medical Association.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D., corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

AMERICAN MEDICAL ASSOCIATION.

The sixty-fifth annual meeting of the association was held at Atlantic City June 22-26, 1914, with an attendance of between four and five thousand. The meeting was characterized by smoothness and harmony and was in every respect a successful affair. Among other occurrences of note was the presentation of a gold medal to Surgeon-General Gorgas in recognition of his sanitary work as a factor in the successful building of the Panama Canal. The House of Delegates recommended that the requirement of one year of service as hospital interne should be compulsory after 1915, and that students entering upon medical education should be required to have had four years' high school course and at least one year of college education. The next place of meeting is San Francisco. In this connection it seems proper to say that the American Medical Association should have a permanent home. The strength of the body and the integrity of its transactions would be materially increased were a handsome monumental meeting place, say in the capital of our country, provided, where the annual meetings could be held. It would be a difficult task to eliminate politics from the affairs of the association, but could this be done and every member of the association be allowed to vote in conducting its affairs, the outlook of our national body would be brighter.

The following officers were elected: President, Dr. William L. Rodman, Philadelphia; Vice-Presidents, Drs. D. S. Fairchild,

Clinton, Iowa; Wisner R. Townsend, New York City; Alice Hamilton, Chicago, and Wm. Edgar Darnall, Atlantic City. Secretary and Treasurer, Drs. Alexander R. Craig and Wm. Allen Pusey, both of Chicago, reëlected.

AMERICAN COLLEGE OF SURGEONS.

This new association, membership in which is coveted by so many surgeons in the United States, met in Washington June 22.

A campaign was inaugurated at this meeting to establish a permanent home to be built in Washington, and more than \$100,000 was subscribed. Membership was conferred upon eleven hundred surgeons. It was decided by the Board of Regents that after November, applicants for fellowship shall have performed at least seventy consecutive major operations and recorded all the details of each, and shall in addition have contributed something of distinct value to surgical knowledge. This requirement will certainly put a decided limit to conferring of fellowship in the future.

Book notices omitted from this number by press of matter.

The trustees of the American Medical Gold Medal Award respectfully announce that the medal for nineteen hundred and fourteen has been conferred upon Dr. George W. Crile, of Cleveland, Ohio, as the American physician who in their judgment has performed the most conspicuous and noteworthy service in the domain of medicine and surgery during the past year.

WM. J. ROBINSON,
CLAUDE L. WHEELER,
H. EDWIN LEWIS,
Trustees.

THE NEW DRESS OF THE ANNALS OF SURGERY.

Owing to the continually increasing amount of material of value, offering for publication in the *Annals of Surgery*, the pub-

lishers have found it necessary, beginning with the July 1914 issue to enlarge the size of the page and also to somewhat reduce the size of type in which the original contributions have heretofore been printed. The enlarged size will also enable the publishers to make a better display of the illustrations which are such an important feature of the *Annals* contributions.

Thirty years ago, when the first number of the *Annals of Surgery* appeared, the size and style then showed suited admirably. At that time a single number contained only 96 pages. They have continued to increase each year until now the average number of pages to an issue is 164. Special issues have been published in which the number has been increased to over 300 pages, with the result that the manufacturing of the Journal in the former style is not extremely difficult but the finished product is unwieldly and can not be read with the ease and comfort which is due a subscriber. In fact, it required constant pressure on the pages to keep them open.

We believe the new form overcomes this inconvenience and enables the publishers to give the reader more material and greater comfort while reading than it could have been possible for them to present in the former size.

The July issue has a choice collection of important articles of exceptional value to the general practitioner as well as the surgeon. It is a splendid example of the way this publication continues to set the pace in surgery.

Publisher's Department

"Robinson's Lime Juice and Pepsin" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See advertisement in this issue.)

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Mrs. M., age 40, had been suffering from piles for a long time and only occasionally obtained relief by using an ointment (probably Angt. Galla) which had been recommended to her. When called I found on examination three prominent growths, one on each side of the anus, the mucous surfaces being abraded and coated with a blood-tinged discharge, the other and larger one in front towards the perineum, and this partially strangulated by the sphincter. Pain was excessive and sitting impossible. I advised operation, but this being declined, directed a piece of flannel saturated with Tr. Opium one part to three parts of Glyco-Thymoline placed over the tumors and an ice bag against it, to be renewed every hour or two. The relief was more prompt than I expected and the nurse was able to give an enema to clear the lower bowel of hardened feces within ten hours after the applications were begun and the following day return the piles. I then directed a half pint to be used every morning as an injection, with the result that it has quite relieved the feeling of pain, fullness, heat and itching, and also cured her constipation.

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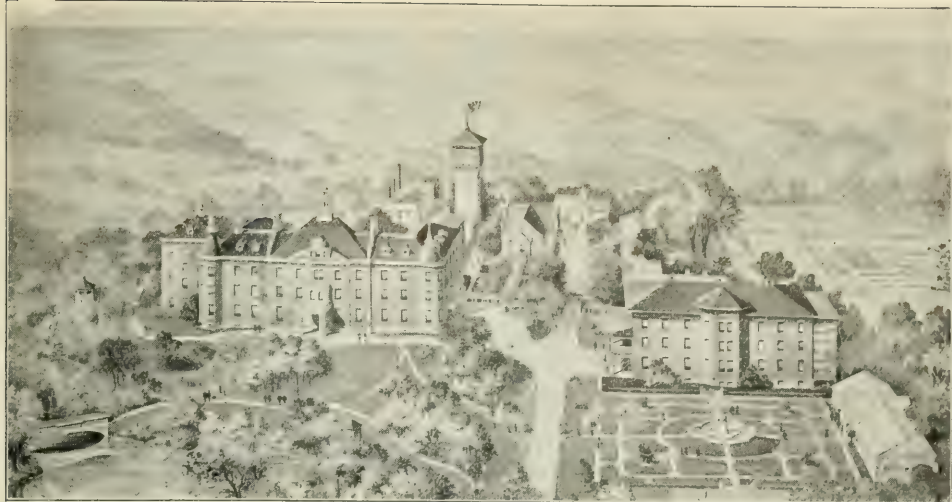
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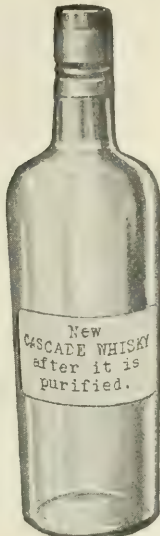
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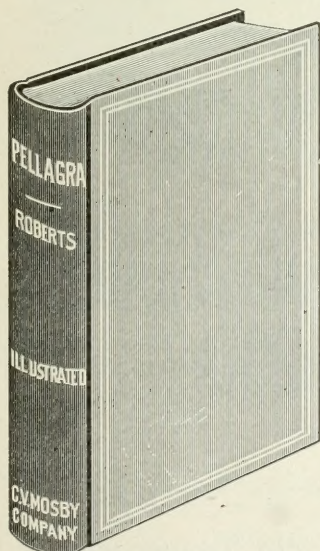
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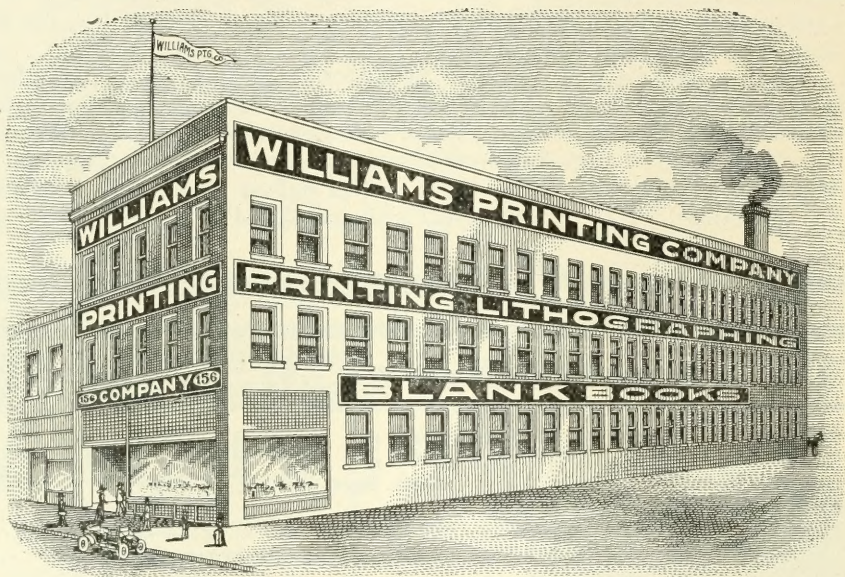
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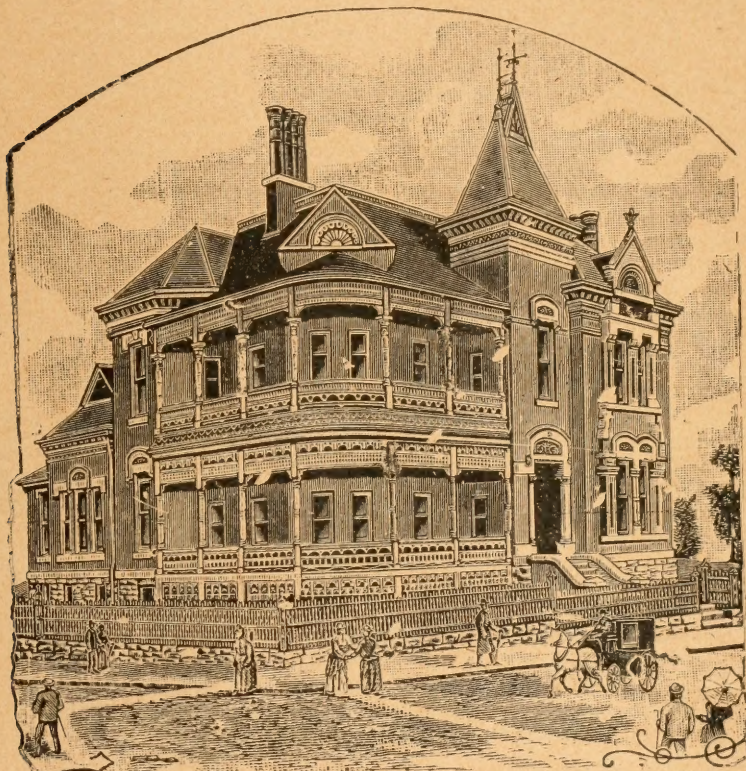


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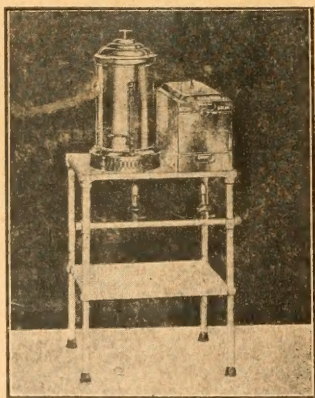
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